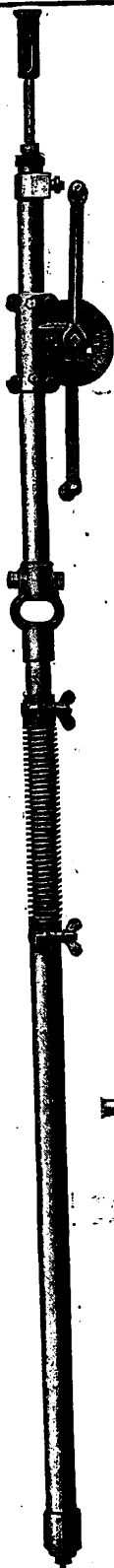


## PHILLIPS DRILL COMPANY

1537  
Cortland Street

CHICAGO, ILL.



## Phillips Spring Hammer Drills

Phillips Spring Hammer Drills for drilling concrete, brick and stone, walls, floors and ceilings, for expansion shields, anchors, etc., are made in a number of sizes to best meet the requirements of the different trades.

The No. 4 hammer, furnished complete, as shown, is a one man tool, recommended for drilling upward holes in concrete ceilings and through floors and for installing Phillips Self Drilling Expansion Shells in ceilings.

It has a 1 1/4-inch gas pipe extension which rests on the floor and carries the hammer when drilling. This extension is telescopically adjustable to accommodate variations in ceiling height, and by adding necessary pipe any height ceiling can be drilled. The spring in extension is under compression when hole is started and automatically feeds the drill. The pressure of this spring holds the tool upright so that it stands alone.

The No. 4 spring hammer drills all size holes 3/8 to 1 1/2 inches, inclusive. List price without hold down lever, \$50.00.

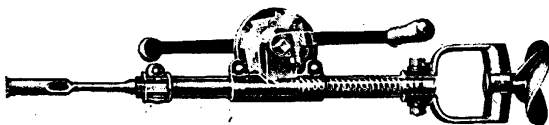
The No. 4 spring hammer with hold down lever is recommended for installing all size rod hanger shells 3/8 to 7/8 inch, inclusive, in concrete ceilings. List price with lever, \$55.00.



Phillips Spring Hammer Drill in Operation

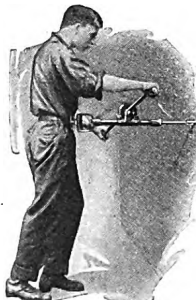


Installing Self-Drilling Expansion Shells using Hold Down Lever



## Number 2 and 3 Spring Hammers

The number 2 and 3 spring hammers, furnished with breast plate, as shown, are lighter tools of different capacities and recommended for drilling side holes in walls, see illustration. These hammers can be used for drilling ceilings by taking off the breast plate and attaching the extension.



No. 4 Spring Hammer

List price No. 2 spring hammer, without extension...\$26.00

List price No. 2 spring hammer, with extension.....\$35.00

Capacity 3/8-inch hole and 1/4-inch self-drill shell.

List price No. 3 spring hammer, without extension...\$31.00

List price No. 3 spring hammer, with extension.....\$40.00

Capacity 1 1/4-inch hole and 3/4 and 5/8-inch self-drill shells.

## Star Points

## Hollow Points

Size	Length	Price	Size	Length	Price
5/8	3	\$1.00	5/8	3	\$1.05
3/4	3	1.00	3/4	3	1.05
7/8	3	1.05	7/8	3	1.15
1	3	1.05	1	3 1/4	1.30
1 1/8	3	1.05	1 1/8	3 1/2	1.35
1 1/4	3	1.05	1 1/4	3 3/4	1.45
1 1/2	3	1.05	1 1/2	4 1/2	1.70
			1 3/4	5	1.85
			1 7/8	5	2.50
			2	5	2.75

Note.—Star and hollow points are made sufficiently long for standard expansion shells.

## Taper Shank Hollow Drills



Size Inches	Length, Inches		Size Inches	Length, Inches	
	8	18		8	18
5/8	\$1.60	\$2.00	1	\$2.25	\$2.65
3/4	1.70	2.10	1 1/8	2.40	2.80
7/8	1.80	2.20	1 1/4	2.50	2.90
1	1.90	2.30	1 3/8	3.00	3.40
1 1/8	2.00	2.40	1 1/2	3.50	3.90
1 1/4	2.10	2.50			

Note.—Hollow Drills for drilling through floor, etc., are made in two lengths. We are prepared to make intermediate or longer lengths up to 30 inches, also intermediate sizes on short notice.

These drills can be resharpened a number of times by recutting teeth and flaring for clearance. Made of high grade tool steel.

## Taper Shank Star Drills



Size Inches	Length, Inches		Size Inches	Length, Inches	
	8	18		8	18
1 1/8	\$1.15		1 1/8	\$1.25	\$1.45
1 1/4	1.15	\$1.35	1 1/4	1.25	1.45
1 1/2	1.20	1.40	1 1/2	1.30	1.50
1 3/4	1.20	1.40	1 3/4	1.30	1.50

## Hand Chuck for Star and Hollow Points



This hand chuck is recommended for use with star and hollow points for drilling side-beams, walls, etc. Price.....\$2.00

## Drill Point Extension



When beams, pipe lines, etc., interfere with turning hammer cranks, use this extension and drop hammer below so cranks will turn freely. Price.....\$2.75

Note.—Phillips Spring Hammers are now made for taper shank drills, so that any drill or shell chuck fits any hammer. If square shank drills are wanted for hammer previously purchased please so specify and give length of shank as 1 1/8 or 2 1/4 inches.



Extension for use with Nos. 2 and 3 hammers for drilling up holes in concrete ceilings and through floors. Price.....\$9.00

## PHILLIPS DRILL COMPANY

1537  
Cortland Street

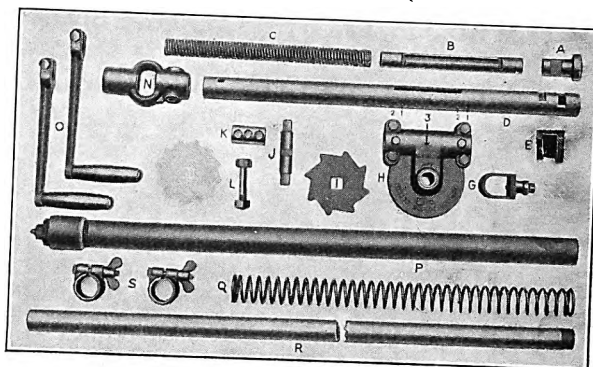
CHICAGO, ILL.

## Phillips Self Drilling Expansion Shells

The Phillips Self Drilling Expansion Shell recommended for fastening various equipment to concrete and stone, and to brick where laid up in cement mortar, is a combination steel expansion shell and drill, consisting of but two parts, the shell and tapered plug or expander. Each shell makes its own hole and is then expanded in the hole and utilized as a fastening, thus eliminating the expense of drills and the labor lost in the use of dull ones.

A new method of expansion. After the hole is drilled to depth the shell is withdrawn and the tapered plug is inserted in the end. The shell and plug are then reinserted in the hole with plug against bottom and the shell driven onto plug. This cuts the hole larger at the bottom and at the same time enlarges the shell to a hard and tight fit, virtually putting a head on the shell that prevents pulling out.

They have internal U. S. Standard Threads for rods, bolts, eye bolts, screws, etc., for fastening all kinds of hangers and for bolting timbers, etc., to concrete. Quickly installed with Phillips Spring Hammer or by hand.



## Parts for Phillips Spring Hammers

When ordering parts give letter and name, and specify size of hammer for which parts are wanted.

A—Drill Chuck for Tapershank drills.

B—Plunger.

C—Hammer Spring.

D—Barrel.

E—Chuck Key.

G—Chuck Collar.

H—Casing.

I—Eight-Tooth Ratchet.

Extension pipe P is standard 1/4-inch gas pipe.

J—Crank Shaft.

K—Plug.

L—Coupling Bolt.

N—Coupling.

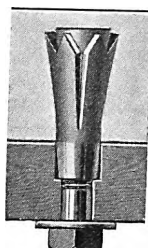
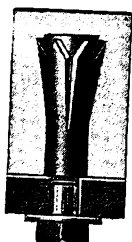
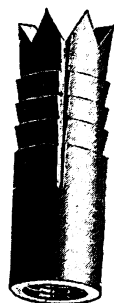
O—Cranks.

P—Extension Pipe.

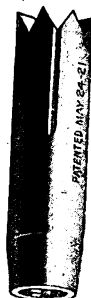
Q—Extension Spring.

R—Extension Tube.

S—Extension Collars.



Bolting Timbers to Concrete



## Flush Shells

## Price List and Specifications

Bolt Size of Shell Inches	Outside Diam. of Shell Inches	Length of Shell Inches	Length of Thrd. Inches	Price per 100 Shells	No. of Shell Holder Inches	Price Each of Holders
1/4	3/8	1 1/2	3/8	\$20.00	1/4	\$1.50
1/8	3/8	1 1/2	3/8	30.00	3/8	2.00
1/2	1 1/4	1 1/2	3/8	40.00	1 1/2	2.25
3/4	1 3/4	2 1/2	3/8	50.00	3/4	2.50
1	2 1/4	3 1/2	1	80.00	1	2.50



Flat Eye Bolt



Ceiling Plate

Price per 100

Size Inches	Flat Eye Bolt	Ceiling Plates
3/8	\$12.00	\$1.50
1/2	20.00	2.35
3/4	26.00	3.20
1	31.00	4.00
1 1/4	.....	75.00

## Rod Hanger Shells

## Price List and Specifications

Bolt Size of Shell Inches	Outside Diam. of Shell Inches	Length of Shell Inches	Length of Thrd. Inches	Price Per 100 Shells	No. of Shell Chuck	Price Each Shell Chuck
3/8	3/8	1 1/2	3/8	\$30.00	C-3	\$4.50
1/2	1 1/4	2 1/2	1	40.00	C-4	5.00
3/4	1 3/4	3	1 1/2	50.00	C-5	5.50
1	2 1/4	3 1/2	1 3/4	80.00	C-6	6.00
1 1/4	3 1/4	4 1/2	2 1/2	110.00	C-7	6.00

## Holder for Flush Shells

This holder with the flush shell is an excellent combination for fastening anything to concrete or stone. It is a neat finished, high grade tool and should be standard equipment in the kit of all installing mechanics, power and industrial plants, hotel and apartment buildings.

See above list for sizes and prices.

THIS HAND CHUCK fits any size shell chuck, as shown, and is recommended for use with same where necessary to install rod hanger shells by hand. Price.....\$2.00

## Shell Chuck

See above list for size and price

The shell chuck has a tapered socket to receive the tapered end of shell and hold it rigid and without injury during the drilling and expanding operations. Shell is quickly removed from chuck by putting the key in top cross hole and giving it a short turn.

